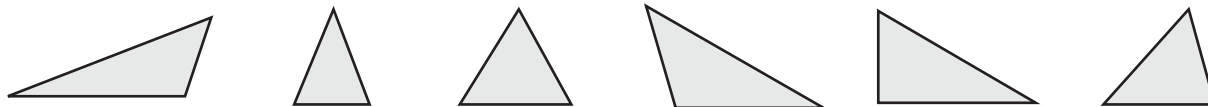


Exploring Types of Triangles

What am I? Scalene? Isosceles? Equilateral? Acute? Right? Obtuse?



Use Sketchpad to explore more types of triangles.

1. Open the sketch **Triangles.gsp** and go to the page “Scalene.”
2. The sketch shows you the angle measures and side lengths. As you drag to answer the questions below, make sure you keep the measures of all three sides different so that the triangle remains scalene.
 - a. Can you have a scalene triangle that is also an *acute* triangle? _____
 - b. Can you have a scalene triangle that is also an *obtuse* triangle? _____
 - c. Can you have a scalene triangle that is also a *right* triangle? _____
3. Go to the page “Isosceles Triangle.”
4. The sketch shows you the angle measures and side lengths. Drag the figure and answer the following questions.
 - a. Can you have an isosceles triangle that is also an *acute* triangle? _____
 - b. Can you have an isosceles triangle that is also an *obtuse* triangle? _____
 - c. Can you have an isosceles triangle that is also a *right* triangle? _____
5. Go to the page “Equilateral Triangle.”
6. The sketch shows you the angle measures and side lengths. Drag the figure and answer the following questions.
 - a. Can you have an equilateral triangle that is also an *acute* triangle? _____
 - b. Can you have an equilateral triangle that is also an *obtuse* triangle? _____
 - c. Can you have an equilateral triangle that is also a *right* triangle? _____

7. Use any of the three sketches (if needed) to tell whether each statement below is true *always*, *sometimes*, or *never*.
- a. An acute triangle is isosceles. _____
 - b. An obtuse triangle is scalene. _____
 - c. An obtuse triangle contains a right angle. _____
 - d. A triangle contains two obtuse angles. _____
 - e. A right triangle is equilateral. _____
 - f. An isosceles triangle is equilateral. _____
 - g. A right triangle has two acute angles. _____
 - h. An equilateral triangle is isosceles. _____